

DETAILED DESCRIPTION OF THE PREFERRED EMOBIDIMENT-DRAWINGS

The present invention provides a hands-free personal hydration unit and temperature regulation component that can be used for the storage and delivery of both hot or cold liquids in various weather conditions while keeping the user comfortable by assisting to regulate body temperature.

FIG 1 illustrates a Combination Hydration & Temperature Regulating Device (A) being draped around the user's neck with the optional straps (B) and Velcro strips (C) in place.

FIG 2 illustrates the device with the exterior jacket/cover removed. The FIC (Fluid and Ice Compartment) (D) holds fluids that are consumed by the user. The adjacent compartment E is the TSRC (Temperature Stabilizer/Regulator Compartment). E is located between the Fluid and Ice Compartment and the user's neck to perform cooling or heating functions for both the consumable liquid and the user. The removable and closable lid/spout F provides for the ability to fill the Fluid and Ice Compartment, dispense liquid for the user and provides a small hook for attaching an optional strap. The additional hook G is utilized to attach the other end of the optional strap for increased stabilization or to use as a shoulder strap.

FIG 3 is a view of the FIC (Fluid and Ice Compartment) D which holds fluids that are consumed by the user. The removable and closable lid/spout F provides for the ability to fill the Fluid and Ice Compartment, dispense liquid for the user and provides a small hook for attaching an optional strap.

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FIG 4 illustrates the TSRC (Temperature Stabilizer/Regulator Compartment) E. This compartment is attached to the adjacent FIC (Fluid and Ice Compartment) to prevent unwanted movement. This compartment houses reusable heating or cooling units in the process of achieving desired temperatures of both the liquid and the user. E is located between the FIC and the user's neck to perform cooling or heating functions for both the consumable liquid and the user. A flap H allows the ability to remove or re-insert the heating or cooling units as needed.

While a preferred embodiment of the present invention has been described, it should be understood that various changes, adaptations and modifications might be made therein without departing from the spirit of the invention and the scope of the appended claims.

TITLE OF INVENTION

Combination Hydration and Temperature Regulating Device

CROSS REFERENCE TO RELATED APPLICATIONS

This is an original application.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH &
DEVELOPMENT

This invention did not utilize any Government funds and was not made under any Government contract.

REFERENCE TO SEQUENCE LISTING, A TABLE, OR A COMPUTER
PROGRAM LISTING COMPACT DISK APPENDIX

Not Applicable.

BACKGROUND OF THE INVENTION

This invention relates to athletic, sporting, and other outside activity devices, and more particularly to liquid hydration containers and body temperature stabilizing/regulating devices that allow for hands-free activities.

Conventional liquid hydration containers, such as water bottles, canteens and thermoses, have been designed and used to for the most part as a delivery system for needed body re-hydration during exercise or other activities. Container enhancements that are represented in U.S. Patent No. 5,409,151 to Freimark and U.S. Patent No. 4,852,781 to Shurnick, et al, introduce the ability to strap drinking containers to the person's extremity to allow for hands-free exercise. In U.S. Patent No. 5,938,089 to Abreu-Marston, additional benefits are described when securing containers to the body increases load on selected limbs and muscles. Further, in U.S. Patent No. 5,207,719 to Janus, a liquid delivery system is described that is U-shaped and can be secured around the user's neck.

Prior art, however, does not address the need for fluid delivery and body temperature regulating while still promoting hands-free physical activities. It is desirable to provide a device that addresses these three critical objectives.

BRIEF SUMMARY OF THE INVENTION

The invention in one exemplary embodiment is a semi-U shaped device that is intended to be worn around the user's neck. The unit encompasses two main internal compartments. The first functional compartment, which we will call the FIC (Fluid and Ice Compartment), is intended to hold a variety of hot or cold beverages as well as ice, if desired, which is to be consumed by the user. The second functional compartment, which we will refer to as the TSRC (Temperature Stabilizer/Regulator Compartment), is intended to house a removable and interchangeable temperature regulator device. Dependent on the temperature regulator device inserted into the TRC, stored fluids will be heated or cooled. In addition, due to the proximity of the TRC to the user's neck, the heating or cooling properties will be transferred to the user. Numerous studies have shown that the carotid arteries located in the neck area play a key role in eliminating discomfort from heat and cold when the opposite temperatures are applied to the area. Additionally, studies have shown that as the condensation moisture created by the invention evaporates from the skin in the neck area additional cooling will occur.

The exterior portion of the container will be covered with a removable jacket or sleeve to assist in the control of thermal exchange effects, including condensation, as well as to provide decorative attributes and increased durability to the device. A removable, closable spout will be used to fill the FIC compartment and dispense fluid when desired. Optional straps and Velcro type strips can be attached to the exterior cover should a user desire additional means for securing the device to their body or clothing.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

FIG. 1 is a perspective view of the Combination Hydration and Temperature Regulating Device worn by a user with optional straps and Velcro in place,

FIG. 2 is a perspective view of the device with the exterior cover removed,

FIG. 3 is a perspective view of the FIC (Fluid and Ice Compartment),

FIG. 4 is a perspective view of the TRC (Temperature Regulator Compartment),

DETAILED DESCRIPTION OF THE INVENTION

In the specific embodiment illustrated, a semi-U shaped device is shown that is intended to be worn around the user's neck to provide for liquid hydration and temperature regulation while promoting hands-free activities. The unit encompasses two main internal compartments (one compartment to house the consumable liquids and solids (such as ice) and one compartment to house the temperature stabilizer/regulator), a dispensing/filling spout, exterior jacket and optional straps. The removable exterior "jacket or cover" of the device can be made from a number of different fabrics and materials, include different colors, designs, writings and artwork not limited in any way to the specific embodiment depicted in the diagrams.

Referring to FIG. 1, the device is placed around the user's neck to promote hands-free activities. Referring to FIG. 2, which illustrates the device without the outer jacket/cover, the compartment located nearest to the user's neck contains the temperature stabilizing/regulating device. This is has been designed to provide dual benefits which include either the heating or cooling of the consumable liquid as well as the heating or cooling of the user. Referring to FIG. 3, consumable liquids (including ice) can be stored for the user's consumption through a removable lid/spout. Referring to FIG. 4, a removable temperature stabilizing/regulating device can be used to heat or cool stored liquids in the adjacent compartment as well as to heat or cool the user through the neck area.

In prior art, attempts were made to address the need for portable personal hydration devices that promoted hands-free activities but they did not address the added need to cool down or warm up the user through external sources. Likewise, prior art addressed the need to cool down or warm up the user but did not address the hydration requirement during physical activities. The Combination Hydration and Temperature Regulating Device proposed is capable of addressing the need for a hands-free personal hydration device that promotes heating and cooling of the consumable liquids as well as the user.

DETAILED DESCRIPTION OF THE INVENTION (CONTINUED)

While there have been described above the principles of this invention in connection with specific apparatus, it should be clearly understood that this description is made only by way of example, and not as a limitation to the scope and specific embodiment of the invention. The invention is forward looking in encompassing future materials that may be introduced into the market that would improve functionality, durability, comfort and/or appearance.